What is claimed:

1. A vector comprising from 5' to 3':

a) a packaging sequence;

b) a heterologous insert sequence or restriction sites for insertion of a heterologous sequence; and

c) a 3' long terminal repeat (LTR) sequence,

wherein at least two codons of the packaging sequence are altered so as to reduce formation of fusion polypeptides encoded by the packaging sequence or a portion thereof, and the heterologous insert sequence.

2. The vector of claim 1, wherein at least two ATG codons of the packaging sequence have been altered.

3. The vector of claim 2, wherein the ATG initiation codon of the packaging sequence and at least one internal ATG codon of the packaging sequence have been altered.

4. The vector of claim 1, wherein the packaging sequence is a *gag* sequence.

5. The vector of claim 4, wherein the *gag* sequence is an amino-terminal portion of the *gag* gene.

6. The vector of claim 4, wherein the gag sequence comprises the nucleotide sequence of SEQ ID NO:2, or a portion thereof.

7. The vector of claim 3, wherein at least two internal ATG codons of the packaging sequence have been altered.

8. The vector of claim 3, wherein the internal codon which is altered is the codon at residues 1097-1099 of SEQ ID NO:1.

9. The vector of claim 3, wherein the internal codon which is altered is the codon at residues 1589-1591 of SEQ ID NO:1.

10. The vector of claim 3, wherein the internal codon at residues 1097-1099 and the internal codon at residues 1589-1591 of SEQ ID NO:1 have been altered.

11. The vector of claim 2, wherein one, two or all of the nucleotides of the ATG codon(s) have been altered.

12. The vector of claim 1, wherein the vector includes a heterologous insert sequence.

13. A vector comprising from 5' to 3':

a) a packaging sequence, wherein at least one ATG codon of the packaging sequence has been altered;

b) a heterologous insert sequence or restriction sites for insertion of a heterologous sequence; and

c) a 3' LTR sequence, wherein the 3' LTR comprises a proviral recovery sequence.

14. The vector of claim 13, wherein at least two ATG codons of the packaging sequence have been altered.

15. The vector of claim 14, wherein the ATG initiation codon of the packaging sequence and at least one internal ATG codon of the packaging sequence have been altered.

16. The vector of claim 13, wherein the packaging sequence is a *gag* sequence.

17. The vector of claim 16, wherein the *gag* sequence is an amino-terminal portion of the *gag* gene.

18. The vector of claim 14, wherein at least two internal ATG codons of the packaging sequence have been altered.

19. The vector of claim 14, wherein the internal codon which is altered is the codon at residues 1097-1099 of SEQ ID NO:1.

20. The vector of claim 14, wherein the internal codon which is altered is the codon at residues 1589-1591 of SEQ ID NO:1.

21. The vector of claim 14, wherein the internal codon at residues 1097-1099 and the internal codon at residues 1589-1591 of SEQ ID NO:1 have been altered.

22. The vector of claim 14, wherein all of the nucleotides of the ATG codon(s) have been altered.

23. The vector of claim 13, wherein the vector includes a heterologous insert sequence.

24. The viral vector of claim 13, further comprising a bacterial origin of replication.

25. The viral vector of claim 24, wherein at least a portion of the bacterial origin of replication has been removed.

26. The viral vector of claim 13, wherein the bacterial marker sequence is a bleomycin marker sequence.

27. The viral vector of claim 13, wherein the proviral recovery sequence is located within a portion of the 3' LTR which duplicates upon integration.

28. A vector comprising from 5' to 3':

a) a packaging sequence, wherein at least one ATG codon of the packaging sequence has been altered;

b) a heterologous insert sequence or restriction sites for insertion of a heterologous sequence;

c) a bacterial marker sequence, wherein the bacterial marker is less than 600 basepairs in length; and

d) a 3' LTR sequence, wherein the 3' LTR comprises a proviral recovery sequence.

29. A viral vector comprising:

a) a packaging sequence;

b) a heterologous insert sequence;

c) a bacterial marker sequence, wherein the bacterial marker sequence is less than 600 basepairs in length;

d) a 3' LTR comprising a proviral recovery sequence,

wherein the vector comprises and can express a heterologous insert sequence greater than about 8 kilobases in length.

30. The viral vector of claim 29, wherein the packaging sequence is altered at an initiation codon of the packaging sequence and at least one potential initiation codon of the packaging sequence.

31. The viral vector of claim 29, further comprising a bacterial origin of replication.

32. The viral vector of claim 31, wherein at least a portion of the bacterial origin of replication has been removed.

33. The viral vector of claim 29, wherein the bacterial marker sequence is a bleomycin marker sequence.